

## **IN THE ABSTRACT:**

Please replace the Abstract with the following:

### **ALL-OPTICAL INTENSITY TO DPSK CONVERTER**

#### **ABSTRACT**

An all-optical converter (10) for converting an intensity-modulated optical signal into an optical signal modulated to the DPSK format, includes a first input (152a) for a first intensity-modulated optical signal (12), a differential encoding module (100) adapted to perform a differential encoding between the first signal (12) and a second optical signal synchronous with the first signal (12), a device adapted to modulate (200) the phase of an optical signal (16) according to the differential encoding performed by the differential encoding module (100), and an output (162c) of the device adapted to modulate (200) delivering an optical signal modulated to the DPSK format (14).